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# BIO-CONTROL OF A PARASITE

Recent discoveries by Dr. Kian Joe Lie, Hooper Foundation parasitologist, opens new avenues in the study of control of a major world disease that afflicts more than 200 million people in Asia, Africa, and tropical America.

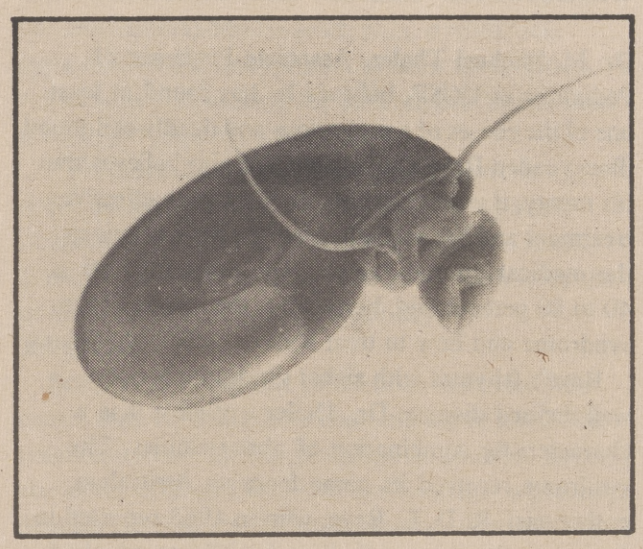
"Our experiments prove that snails have an immune system—something never before demonstrated—and we are now able to induce specific resistance to parasitic infection in certain species of snails," says Dr. Lie. "Moreover, in our experimental snails we have discovered a relatively large organ which produces cells that play a significant role in the destruction of parasites in the snail. This organ has never before been observed, because it only develops in response to certain pathological conditions, after which it shrinks and again becomes invisible."

The significance of these findings, Dr. Lie explains, is that the basic principles about snail immunity can now be learned, and the results will be of great importance to the relatively new field of invertebrate immunology and to the study of the evolution of immunity.

Dr. Lie and his main collaborator, Dr. Donald Heyneman, Professor of Parasitology and Assistant Director of Hooper, are publishing their findings in a series of papers in forthcoming issues of the *International Journal for Parasitology* and the *Journal of Parasitology*.

**Life-cycle of the Parasite**

The dread scourge called schistosomiasis (pronounced shis-toe-so-my-usis) is caused by a tiny parasitic flatworm (trematode, sometimes called fluke) that lives in fresh-water snails which grow by the millions in canals, ditches, lakes, and rivers. The larvae of the schistosome parasites emerge from the snails to swim freely in the water, propelled by their rapidly flapping forked tails. These tiny larvae, barely visible to the naked eye, can easily penetrate the skin of humans who may be working in irrigated fields, swimming, or washing in a stream or river. The larvae then enter the blood vessels and are carried into the lungs and liver. Ultimately they lodge in the veins of the intestine or urinary bladder, where they mature and lay their eggs. The eggs are returned to the water in the fecus or urine of their human hosts. They soon hatch and release swimming larvae, which in turn take up their abode in the snail, again to repeat the cycle of reinfection.



Biomphalaria glabrata *snail used in Dr. Lie's experiments. It is one of the intermediate hosts for* Schistosoma mansoni, *the parasite responsible for a disease that afflicts over 200 million people in Asia, Africa, and tropical America.*

The disease afflicts whole populations. It damages the liver and other tissues. It becomes a chonic burden to the humans who contract it, depleting energy and shortening their lives. Drugs used to cure the disease are toxic. In large areas it cannot be controlled by sanitary means or by use of chemicals to kill off the snails. Infections are on the increase, especially in Africa, the Middle East, and South America. With the building of the Aswan Dam in Egypt and the Volta Dam in Nigeria, larger bodies of water have been created and distributed over many hundreds of miles through new irrigation canals. Consequently, more millions of snails breed, spread, and become infected. Disease rates have soared.

**Biological Control of Parasites**

Scientists believe that biological control of the snails harboring the schistosome worms may be an important new approach to conquering the disease. Toward that solution Dr. Lie has been patiently studying snails for 15 years, both in the field and in the Hooper Laboratories in San Francisco and Kuala Lumpur, Malaysia.

About ten years ago, Dr. Lie found a new phenomenon: competitive antagonism among various trematodes in the snail, a subject that has since been tested on a small scale in the field to control schistosomiasis.

The painstaking work of the Indonesian-born researcher and his colleagues has culminated in new and remarkable discoveries that have a great potential for the bio-control of schistosomiasis and other important trematode infections, such as the cattle liver-fluke . . . and perhaps for still greater theoretical

interest in helping to understand the origin and mechanisms of immunity.

In the carefully maintained tropical atmosphere of the laboratories in the Hooper Foundation are hundreds of tanks containing thousands of snails of different species . . . from Brazil, Egypt, Ethiopia, the Yemen Arab Republic, and Puerto Rico. Lettuce scraps float atop the tanks and various sizes of ordinary school-room chalk lie at the bottom—the snails' food and shell building material.

Technicians tend the snails, breeding generation after generation of them, keeping some healthy, infecting others with parasites. The snails are studied under the microscope while they are alive, and, after death, their cell structure and reactions to infection are evaluated.

The snails studied in the recent experiments go by the musical name of *Biomphalaria glabrata.* They are nonpigmented, thus easily studied under the microscope because their shells are transparent.

When the snail is exposed to the parasite used in the experiments, the parasite larva (miracidium) enters into the snail; then the larva travels quickly to the snail's heart, where it becomes mature and produces new larvae. However, when the snails are exposed to irradiated miracidia, the trematode are unable to survive in the heart. Instead, they are soon destroyed by blood cells or amebocytes.

When these same snails are then re-exposed to the same species of flukes . . . in these experiments it is *Echinostoma lindoense* . . . the new larvae are quickly destroyed by amebocytes, usually in the head-foot region of the snails.

**Acquired Specific Immunity**

In other words, these snails demonstrated an acquired immunity to a particular parasite, just as humans vaccinated against polio are able to resist any further exposures to the virus. Dr. Lie and his collaborators have also shown that this acquired immunity is specific: the snails remain susceptible to other related trematodes—an essential attribute of immunity in the generally accepted sense.

"It has never before been demonstrated—or even realized—that invertebrates can develop an acquired specific resistance to parasites," Dr. Lie points out.

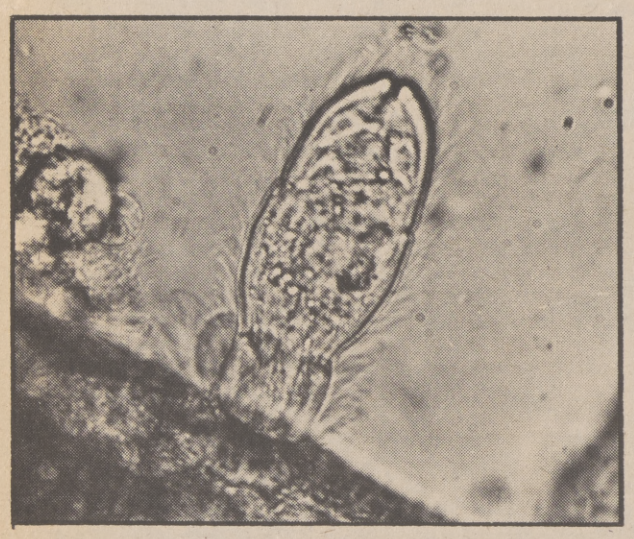
This discovery is likely to upset previously held scientific beliefs about the origin of immunity (the ability to develop an acquired specific resistance in response to previous contact with a pathogen). It is generally thought that in the evolutionary development from lower to higher creatures, immunity first developed in the lamprey fish, one of the most primitive invertebrate animals. However, it now appears that this capacity extends far back among the lower divisions of animal life.

According to Drs. Lie and Heyneman, these recent discoveries augur a breakthrough on the whole subject of invertebrate immunology. "Now that we have a technique for inducing a specific immune response in previously susceptible snails, we may apply and adapt this technique for the study of other species of trematodes in snails and of other invertebrates," they explain. "The technique is simple, reliable and repeatable for *Echinostoma lindoense* and for several other echinostomes we have studied.

"Most important," they conclude, although further study and modification of our techniques will be necessary, we now know that the snails . . . and probably other invertebrates, such as insects . . . do have the potential of developing an acquired specific resistance—a finding that should open up new possibilities for basic research and for the study of bio-control of various parasitic diseases."

Dr. Lie's work is supported by grants from the National Institute for Allergy and Infectious Diseases, National Institutes of Health, U.S. Public Health Service.

*Joan Spiegelhalter*



*The minute echinostome miracidium penetrating through the epithelium of the foot of a snail. It is only 1/10th of a millimeter—barely discernible to the naked eye—and produces over 10,000 eggs.*

## Research Yields Treatment

Dr. M. Michael Thaler, Associate Professor of Pediatrics at UCSF, believes he has found at least one of the causes of a mysterious and deadly childhood illness called Reye's syndrome. He also believes that his theory, if correct, points the way to an effective treatment and has recently reported his findings in the medical journal *Lancet.* The mortality rate is 40 to 80 percent and, heretofore, the causes of the syndrome and how to treat it have baffled physicians.

Reye's (rhymes with sighs) syndrome is not a well-defined disease, Dr. Thaler explains; it is a characteristic combination of abnormalities. The syndrome received its name from an Australian pathologist, R. D. K. Reye, who in 1963 reported in *Lancet* on the autopsy findings in children who had died of what seemed to be the same disease, for which no cause had been discovered. In each case, death was caused by fatty destruction of the liver and edema (swelling) of the brain.

The syndrome affects only children—from infancy to the teens. It can strike with sudden ferocity, sometimes leading to death within 24 hours. It usually follows recovery from a viral disease, such as flu or chicken pox. Sudden, persistent vomiting and abdominal pain are often the first signs. Then lethargy, disorientation, and coma develop rapidly. If a child goes into a really deep coma, the chances are that the child will not recover.

Dr. Thaler says that 10 to 15 children with Reye's are treated in the Bay Area every year. Last year—a record year for flu—the National Communicable Disease Center in Atlanta, Georgia reported 356 cases of Reye's across the nation, which points to its close association with viral infections. Forty percent of these children died.

Clinical laboratory tests alone are able to distinguish Reye's syndrome from other ailments, says Dr. Thaler. He advises parents to seek immediate medical help if, following their child's viral illness, the child should display any of the symptoms associated with Reye's.

**The riddle of cause**

Some investigators believed that a virus was the actual cause of Reye's, but such a virus has never been discovered and the exact cause has, up to the present, remained unknown. Treatment has been hit or miss: exchange blood transfusions; peritoneal dialysis; or just good supportive care with particular attention to reduction of the cerebral swelling.

Dr. Thaler had seen a number of children die from Reye's, and he pondered on the mysterious pathways which lead from the liver to the brain. "I began to look at Reye's from the point of view of metabolism," he explains. All the children he observed who died of Reye's had large amounts of ammonia in their blood. Ammonia is a poison which, ordinarily, is detoxified by the liver and converted safely into urea and excreted in urine. If, however, elimination of ammonia fails, ammonia builds up in the body and poisons it. "I began to suspect an underlying enzyme defect in the liver," Dr. Thaler continues. "With such a defect, a child might have the minimal ability to metabolize ammonia when well, but *not* when under the special stress of a viral illness; especially since intake of protein would be curtailed because of lack of appetite, or vomiting."

Aiding Dr. Thaler in his research has been the Urteaga family of Stockton. Jennie and Nelson Urteaga's first son died at birth. Their second son, Richard, died of Reye's four years ago at the age of two. Then about two years later, their third and remaining child, Danny, was brought to Moffitt Hospital with the dread symptoms of Reye's. Danny, however, recovered.

**Occurrence of syndrome within a family**

The coincidence of two cases of Reye's in the same family made a strong impression on Dr. Thaler. He carried out careful laboratory studies on Danny, which confirmed his suspicion of an inherited enzyme deficiency of the liver. "We found that one key enzyme was deficient in Danny, called ornithine-transcarbamyase, and important in the conversion of ammonia to urea. Fortunately, we could substitute

*Dr. M. Michael Thaler, (standing) with Mr. and Mrs. Nelson Urteaga and their son, Danny.*

or make up for the faulty enzyme by giving Danny an amino acid called arginine," Dr. Thaler explains. (Amino acids are the building blocks of which proteins are constructed, and arginine is one of the amino acids that are essential for life.)

One year later Danny was hospitalized again with symptoms of Reye's, and again he was given arginine to compensate for his enzyme deficiency, after which he was restored to his usual happy and energetic self.

Meanwhile, Dr. Thaler was able to document liver enzyme deficiency in a nine-year-old girl who became acutely ill followng chicken pox. Although she fell into deep coma for 36 hours, she, too, recovered. Examination of her blood and liver tissue showed the same enzyme defect as Danny's, plus another one.

Dr. Thaler explains that there are five steps in the process of converting ammonia to urea: if one enzyme is missing or defective at any given point the whole process will be blocked.

The hereditary nature of Danny's enzyme deficiency was borne out by Dr. Thaler's examination of other members of Jennie's maternal relatives. Jennie's mother had lost two sons and one daughter; and her maternal aunt had lost three sons in their early childhood, apparently of the same condition that affects Danny. On the other hand, Jennie's three sisters and one brother are free of the defect, as are her aunt's three daughters. Says Jennie: "Danny's behavior when he was ill is exactly what my aunt said she observed in her boys who died." Dr. Thaler says that although the enzyme defect affects some of the females in this family to some degree it affects the males severely.

**Successful treatment**

Danny, now five years old, returned to Moffitt Hospital again in January, a very sick boy. He had had a cold, his appetite was poor, and he was losing weight. Then suddenly the frightening disoriented behavior started, signaling that Reye's was threatening again. "It was like he was out of his head," his mother describes it. Danny's pediatrician in Stockton tested his ammonia level, which was over 100 (normal level is up to 100). By the time he arrived at Moffitt Hospital his ammonia level was over 300.

The doctors knew what to do: they fed Danny infusions of arginine through his veins, knowing from previous experience that this amino acid would quickly reduce the life-threatening buildup of ammonia. Next day Danny was playing happily in the playroom with the other children. He was able to go home the following day.

Enzyme deficiency is not necessarily sex-linked, nor racially linked, as in the Tay Sach's syndrome or sickle cell anemia, says Dr. Thaler, but it is inherited.

His research and clinical experience with Danny and other children has demonstrated that liver enzyme deficiency can cause Reye's syndrome. Further, and perhaps most important, he has demonstrated that giving the appropriate amino acid may be effective in treating many other cases of Reye's syndrome.

*Joan Spiegelhalter*

# Do You Clench or Grind Your Teeth?

"Bruxism is a common disorder which, like decay and gum disease, can result in pain and tooth loss," says Dr. Ben W. Pavone, Dean of UCSF's School of Dentistry.

Bruxism means to gnash the teeth. According to Webster, it is "the habit of unconsciously gritting or grinding the teeth, especially in situations of stress or during sleep."

A more comprehensive definition is given by Dean Pavone: "Bruxism is the *clenching* as well as the grinding of the teeth."

Bruxing is not done just in sleep, but also during waking hours, and generally people are just not aware that they are doing it, according to Dean Pavone. "It's a habit, and a very destructive one. A pipe smoker may clench his unlit pipe between his teeth, or a golfer may clench his jaws while concentrating on hitting a long drive. Some people may grind their teeth because of discomfort in their mouth from a rough tooth or a bad bite (malocclusion)."

Yet bruxing can take a terrible toll: It can crack and break teeth, cause sore gums, move teeth around in the jaw by breaking down supporting bone, and cause pain in the joints of the jaw. The destructive power of the bruxing habit can exert pressure up to 200 pounds per square centimeter, Dean Pavone explains.

Bruxing can be both the result or the cause of malocclusion. Moreover, even small children can, through bruxing, wear down their teeth excessively. One of the most painful results of long-term bruxing is severe pain in the upper jaw in which the joint between the cranium and the lower jaw becomes traumatized or inflamed. Technically, this is called the temporomandibular-joint, pain, dysfunction syndrome. It becomes painful to chew food. This is nature's way of warning the sufferer that he has been chewing or grinding too hard.

"The teeth should be kept slightly apart at all times, except when swallowing or chewing food," advises Dean Pavone. In chewing food, the actual contact time between upper and lower teeth is on the average less than 12 minutes per day.

**Treatment**

Bruxism is a complex problem to treat since the causes may be multiple—a combination of habit and emotional stress factors as well as mechanical factors, according to Dean Pavone. If malocclusion is present, dentists can reshape the teeth, realign them with orthodontia, or build them up with gold or porcelain. If teeth are missing they can be replaced with bridge-work or partial dentures. Sedatives can ease the tensions of a person undergoing unusual stress or pain.

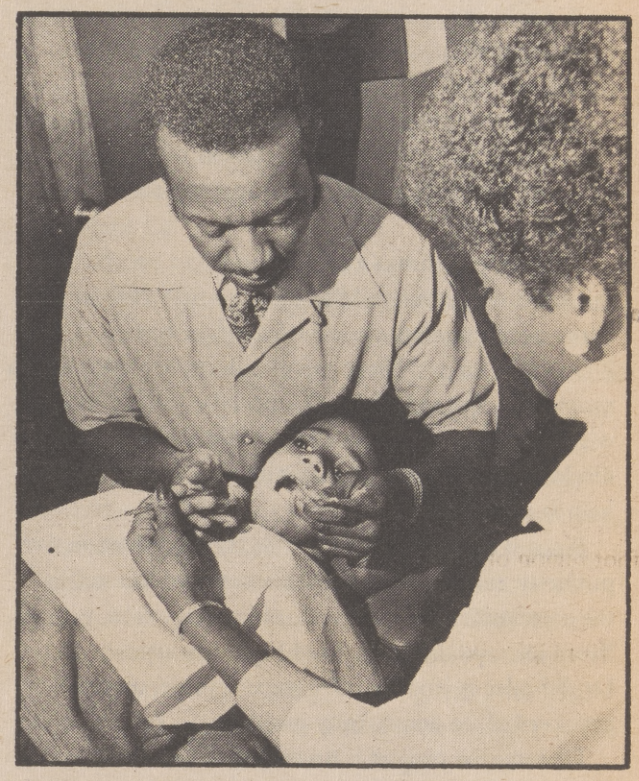
"Reshaping of teeth is probably the most common treatment for eliminating the mechanical physical discomfort that causes bruxism," says Dean Pavone. "The healthy mouth, with proper alignment between the masticating surfaces of the teeth, is probably one of the best insurances against developing bruxism."

Often, people do not know they have the habit until someone—usually their dentist—calls their attention to it. Once they are made aware and understand the harm that can result from bruxing they can, through close observation of themselves and through auto-suggestion, remind themselves to stop. In short, they can break the habit. In difficult cases, the wearing of a plastic splint, temporarily to help awareness and to break the habit, is frequently effective.

"Since bruxism occurs in more than 60 percent of the adult population, it becomes increasingly more important that the School of Dentistry devote an extra effort to clinical investigation and research of problems related to the diagnosis and treatment of bruxism," Dean Pavone concludes.

*Joan Spiegelhalter*

# Dentistry Graduate's Community Work



*Courtesy of Oakland Tribune*

"We grew up in a ghetto neighborhood where the only time my six brothers and sisters and I ever saw a doctor or dentist was during an emergency," recalls King Rhodes, D.D.S.

For as long as he can remember, Dr. Rhodes aspired to a health sciences career. Today, personal involvement in community health care has become a way of life for this soft-spoken, charismatic graduate of the UCSF School of Dentistry (Class of '73).

Since January of this year, Dr. Rhodes has been the full-time Director of Oakland's free Children and Youth Project Clinic. He also spends two evenings a week providing dental service at the West Berkeley Health and Dental Clinic which he helped to organize. In addition, he is the Director of the East Bay's Career Research Association, a volunteer organization of business and professional people who provide career counseling and motivation to minority youth.

To increase his potential for human service even more, he plans to begin studies this fall for a Master of Public Health Degree at UC Berkeley.

Dr. Rhodes' introduction to dentistry began in the Army during the Vietnam War when he gained experience as an assistant in dental and plastic surgery. Later he earned his Bachelor of Science degree, working his way through studies at UC Berkeley, San Francisco State University, and Merritt College, Oakland.

While enrolled at UCSF, Dr. Rhodes performed volunteer dental service at San Quentin Prison and

he spent two summers traveling with the UCSF Mobile Dental Clinic helping to provide dental care for children of migrant workers in the San Joaquin Valley. For two-and-one-half years he participated in the "Upward Bound" project, based at Mount Zion Hospital, which provides dental services, counseling, and guidance to disadvantaged youth.

With this background, he was superbly qualified for the staff of the Children and Youth Project clinic, a federally funded program of the Alameda County Public Health Service. The clinic, housed in a modernized building at 2930 Summit Street, Oakland, provides comprehensive health care to children up to age 15 living in North Oakland and Emeryville.

It offers free medical, dental, nursing, and social services as well as nutritional counseling and health education. The clinic sees more than 100 children each week, the majority of them black. It also serves Spanish speaking, American Indian, and white families living in the target area.

"The most important thing we do," says Dr. Rhodes, "is to promote community awareness of the importance of continuing preventive and remedial health care."

The clinic staff has an opportunity to emphasize this need when the child makes the first visit to the clinic accompanied, as required, by a parent. Later, if the child fails to keep appointments, a public health nurse or health aide makes a special effort to find out why. Visits to the home, or the child's school often disclose related social and health problems for which help is available.

Since it opened, the clinic has conducted an active publicity campaign to make its services known in the community. Newspapers, radio, television, posters, flyers and speakers are used for this purpose, and Dr. Rhodes is himself a frequent and persuasive speaker before community groups.

He feels the project is an easy cause to "sell" . . . "an idea whose time has come." Dr. Rhodes foresees the growth of many more outreach efforts designed to bring primary health care into neighborhoods where it is needed the most.

*Claire Wray*

## Noted Surgeon Dies

Dr. Leon Goldman, Professor of Surgery, Emeritus, died March 4th after an illness of six weeks duration. He was 71. Funeral services were held at Temple Sherith Israel.

A distinguished surgeon and teacher, Dr. Goldman completed his undergraduate studies at the University's Berkeley campus and received his medical degree from the San Francisco campus School of Medicine. He served his internship and residency at San Francisco General Hospital.

Expressing his appreciation for the many contributions Dr. Goldman made during his years of service to the University, Chancellor Francis A. Sooy said: "Although academic and professional accomplishments extracted a heavy toll from him in time and effort, he never neglected his interest and devotion to the poor and underprivileged. San Francisco General Hospital and its programs were always uppermost in his concerns. Much of the excellence at that institution today can be attributed to his efforts."

During the forty years he was a UCSF faculty member, Dr. Goldman's appointments included that of Chairman of the Department of Surgery from 1956 to 1964. He was also an Associate Dean in the School of Medicine and a member of numerous campus committees. He was the recipient of both the Outstanding Teacher Award and the Outstanding Alumnus Award.

The author of more than 100 scientific articles, his most recent publication was a text book, "Carcinoma of the Breast," co-authored with Dr. Gilbert Gordon.

Dr. Goldman's membership in professional societies included the Pacific Coast Surgical Association, of which he was a past President; the American Surgical Association in which he served as First Vice-President; the Society of University Surgeons; the American College of Surgeons; and the American Association for the Advancement of Science. He was also Chairman of the successful San Francisco General Hospital bond issue.

Surviving Dr. Goldman are his three daughters; Dianne Feinstein, Lynn Kennedy, and Yvonne Banks. He is also survived by a sister, Regina Rubin, and three brothers: Dr. Alfred Goldman, Joseph Goldman, and Frank Goldman.

The family requested that memorial gifts be sent to the Regents of the University of California for the Leon Goldman Chair of Surgery, in care of the Chancellor's Office, University of California, San Francisco, CA 94143.

## Dr. Strait Suffers Heart Attack

Professor of Biophysics, Emeritus, Louis Avrom Strait suffered a fatal heart attack March 23rd. A faculty member of the UCSF School of Pharmacy for 34 years, he taught physics and was a pioneer in the application of spectroscopy to determine the nature of molecular structure.

In 1937 Dr. Strait established the Spectrographic Laboratory, which served all Schools on the UCSF campus. He was the first recipient of the Louis A. Strait Award given in 1974 by the Northern California Society for Spectroscopy.

During a memorial service held in Millberry Union recently, Dr. Jere Goyan, Dean of the School of Pharmacy, described some of the scientific research accomplished by Dr. Strait. Dr. Goyan noted Dr. Strait's successful application of stereoscopic techniques to biological problems, such as the work with Drs. Herbert M. Evans and Oliver Emerson in the isolation and identification of Vitamin E. Dr. Strait also investigated the nature of mammary tumor-producing substances and the carcinogenicity of estrogens and polycyclic hydrocarbons.

Dr. Goyan also cited Dr. Strait's research on changes in blood-brain barrier permeability and its relation to convulsions; and on the estimation of drugs and vitamins in brain tissue and cerebrospinal fluid.

Chancellor Sooy recalled the valuable contributions made by Dr. Strait to the Academic Senate and his fearless pursuit of justice.

"Louis Strait was the conscience of the San Francisco campus". . . . was Dr. Sooy's characterization of the man who served as Chairman of the Academic Senate, Chairman of the Committee on By-Laws, and of the Committee on Rules and Jurisdiction.

Speaking also at the memorial tribute, former Dean of the School of Pharmacy, Dr. Troy C. Daniels recalled his close personal friendship with Dr. Strait, whom he described as a man with "a keen sense of humor, whose love of puns and friendly banter were balanced by a disciplined, scholarly approach to and treatment of science."

"Louis was not attached to any formal religious organizations, but his personal conduct, his ethical standards, his gentle and sympathetic feeling for those in need, and his willingness to become personally involved in helping others, represent the finest and most basic precepts of all religions."

Dr. Strait held undergraduate and a Master's degree from the University of Colorado and a Doctoral degree from the University of California, Berkeley. His outstanding service was recognized with an honorary LLD degree given to him by the University.

The family requested that memorial contributions be sent to the Student Loan Fund, School of Pharmacy, University of California, San Francisco, 94143.

## Family Forum Conferences

The Family Health Center of San Francisco General Hospital, headquarters for the UCSF Family Practice Residency Program, renews its invitation for interested persons to attend the Family Forum series on family processes and family change.

These programs are held every other Thursday from 11:00 to 12:30 p.m. in Carr Auditorium, SFGH. Speakers during May and June are:

May 1 Richard Goldberg (founder-member, Arbors Association, London)
"Asylum: A Self-Regulatory Approach to the Idea of Psychiatric Community"

May 15 Effie Poy Yew Choy (president, East West Academy of Healing Arts)
"Chinese Medicine: Its Significance to Family Health Care"

May 29 Bernard Apfelbaum, Ph.D., (director, Berkeley Sex Therapy Group)
"Explorations in Individual Sex Therapy"

June 12 Gerald W. Smith, E.D., (Family Therapist)
"A Structured Family Therapy Procedure for Couples Seeking Marital Therapy."

## Informed Consent Conference

A conference on "Informed Consent in Human Subjects Research" will be held at UCSF on May 16 and 17. The conference, open to the campus community and the public, is sponsored by the Department of Social and Behavioral Sciences and the Research Committee of the School of Nursing, together with the Health Policy Program of the School of Medicine.

A series of panels and speakers on critical issues "Informed Consent: Burden or Benefit to Research" from 9 a.m. to 5:30 p.m. in Toland Hall and on Saturday, May 17 from 9 a.m. to 12 noon in 721-N. The conference will conclude with a statement on "Informed Consent: Burden or Benefit to Research" in which the ethical dimension of research can be clearly stated.

For information about the conference, call Dr. Virginia Olsen, 666-2453.

# Dr. Hume Honored

*Portrait of Dr. Portia Bell Hume, commissioned by friends and executed by artist Dorothy Davis.*

On the evening of March 12, the outpatient lobby of Langley Porter Neuropsychiatric Institute was packed with friends and colleagues of Dr. Portia Bell Hume, come to honor her at the presentation of her portrait to the Institute where, in 1942, she developed and directed the first outpatient psychiatric clinic to be established in the Bay Area.

The portrait, commissioned by admiring peers and executed by artist Dorothy Davis, now graces the lobby's walls.

Dr. Hume, internationally renowned psychiatrist and psychoanalyst, is famed for her leadership in establishing community mental health programs and for fostering legislation that has benefitted mental patients in California (The Short-Doyle of 1957 and the Lanterman-Petris-Short Act of 1967). She has been a member of the UCSF faculty since 1940 and is now Clinical Professor of Psychiatry, Emeritus.

The committee honoring her was headed by Dr. James A. Peale, Director of the John Hale Mental Health Services; Donald D. Doyle, co-author of the Short-Doyle Act; and Dr. Chauncey Leake, Senior Lecturer in History of Health Sciences and Pharmacology at UCSF.

Arrangements for the event were by the Friends of Langley Porter. Music played in the background and refreshments were served.

In addition to presentation of the portrait to LPNI, a book relating Dr. Hume's eventful life was presented by Dr. Chauncey Leake to the Institute's library and gratefully accepted by Librarian Edwarda Adams. The volume, entitled "Portia Bell Hume: The Mother of Community Mental Health," is a part of the Bancroft Library's history of California series.

A native Californian, the granddaughter of pioneers, Dr. Hume received her M.D. degree in 1938, but previous to this she did graduate work in philosophy and studied sculpture in Paris. It was there that she married Samuel James Hume, a leading scholar of the drama. Former UC President, Robert Gordon Sproul, gave "the bride away." Dr. Hume also designed the home in which she still lives. Although known to Berkeley residents as "the castle," the residence is actually more similar to a Romanesque-Gothic cloister, with a raised garden in the center. Her husband died in 1962, shortly after they had celebrated their 35th wedding anniversary.

Speaking with warmth and humor about significant people and incidents of her past Dr. Hume said she entered medical school upon the advice of the late Dr. Herbert M. Evans, famed UC endocrinologist and discoverer of vitamin E. Of Dr. Chauncey Leake, she said, "I learned about medical ethics from him—at a time when it was unique for anyone in medical school to talk about medical ethics."

Dr. Hume's career as a practitioner and teacher of psychiatry is distinguished by her successful efforts to establish many community mental health projects, including the Berkeley State Mental Hygiene Clinic and the Cowell Hospital psychiatric clinic at UC Berkeley. From 1951 to 1961, she was Deputy Director of the State Department of Mental Hygiene, charged with the responsibility of developing and administering the program of community mental health services and clinics throughout the State. In 1961 she was appointed Director of the new Center for Training in Community Psychiatry at Berkeley, which was a pioneering agency in the field and a model to other community psychiatry training programs then beginning to burgeon in the nation.

In 1969 Dr. Hume received the J. Elliot Royer Award, given annually to a Bay Area physician in recognition of major contributions toward the advancement of psychiatry and neurology. At that time, Dr. David W. Allen, then Chairman of the Mental Health Committee of the San Francisco Medical Society, wrote in support of her nomination for the prestigious award: "We feel that there are few people in this country who have done as much to help psychiatry and to provide adequate care for the mentally ill as has Doctor Hume."

*Joan Spiegelhalter*

# How Exercise Improves Learning

New ways to help retarded children are emerging and being put into practice as a result of research done in the School of Nursing's Department of Mental Health and Community Nursing.

Patricia Pothier, R.N., M.S., Associate Professor of Nursing has collaborated with Delmont Morrison, Ph.D., Associate Clinical Professor of Medical Psychiatry at UCSF, in studies showing that sensory integrative training of children with developmental disabilities helps them to develop expressive language —one of the most significant deficits in young, retarded children.

Says Ms. Pothier: "Improving a child's motor coordination is extremely helpful in overcoming his or her learning disabilities, and has been found to significantly increase language development." She explains that some children retain reflexes that normally should disappear about the age of six months. An example is the tonic neck reflex, in which parts of the child's body moves in the direction that the head turns. In addition, some children lack automatic postural reflexes they should have. After tests to determine what reflexes these children do or do not have, integrative training is instituted in play situations which retrain abnormal reflexes to become integrated with normal movement and which aid the child's postural reflexes to develop.

"We believe that sensory integrative training has major implications for language training and we expect this training will become a part of all developmental programs for pre-school, retarded children," says Ms. Pothier.

Sensory integrative training is based on the concept that motor development and learning go hand-in-hand, according to the theories of the French psychologist, Piaget. For a child's intellectual potential to be fully realized, it is necessary for that child to be stimulated and to be able to use the stimulation of the surrounding environment. But in a child with developmental handicaps, whose motor centers of the brain have been damaged or are still immature, the automatic reactions so necessary for normal development of movement are not available, or are only partially available. Such a child tends to have poor muscle tone, is awkward in movement, has difficulty in performing fine motor movements, has difficulty in hearing, in perceiving and identifying shapes, and in distinguishing right from left.

Therefore, each of the training techniques is directed to correct the specific disability an individual child has, as determined by the assessment process. Learning to roll and somersault lead to more advanced types of movement. An exercise such as crawling in a straight line and then in a circle while holding a toy auto, keeping the eyes focused on the toy, inhibits the asymmetrical, tonic neck-reflex referred to above. It then integrates the reflex into normal movement.

Other techniques involve walking on a balance beam, twisting on a twist board, and rolling on a barrel to help develop balance. While bouncing, climbing, jumping, rocking, running, etc., the child learns spatial relationships and how to move from the frame of reference of his body image.

Ms. Pothier says that the children enjoy this "play" training and the group interaction with other children. They are further helped and strongly motivated by "performing" in front of a large mirror.

The researchers and their physical therapy consultant, Katy Horr, are currently writing a textbook and a manual on "Sensory Integrative Training." Also, they have developed a film called "Watch Us Move" showing a small group of retarded children undergoing sensory integration training in their day-treatment school and the beneficial effects of this training on their development. This happy, hopeful, and informative film was made by CORT (Communications Office for Research and Teaching) at UCSF. A training manual accompanies the film, describing in detail the steps toward developing a sensory integration program.

The film is available to professionals through the University of California, Extension Media Center, Berkeley, California.

*Joan Spiegelhalter*

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# Dentistry Alumni Meeting

The School of Dentistry Alumni held its Seventy-ninth Annual Scientific Session recently. The two-day meeting was dedicated to Dr. E. William Ferber, Class of '33, whose two year internship at UCSF was followed by post-graduate work in Oral Surgery at the University of Berlin, Germany, and at Letterman Hospital and Walter Reed Hospital.

Dr. Ferber has served on the UC Dental Alumni Association Executive Council since 1947. He is a past-president of the Association and of the Northern California Society of Oral Surgeons. He has also been a member of the Board of Directors of the San Francisco Dental Society for 25 years.

Currently, Dr. Ferber is Chief of Dental Service at Childrens Hospital and Medical Center of San Francisco. For the past 25 years he has been a Clinical Instructor in the Department of Oral Surgery at UCSF.

The meeting also honored the Fiftieth Anniversary of the Class of '25.

Keynote speaker was Joseph Waheed, vice-president and senior economist with Wells Fargo Bank. His topic was the economic outlook for 1975, and beyond.

*A standing ovation was accorded Dr. E. William Ferber (at the podium) to whom the UC Dental Alumni dedicated their Seventy-ninth Annual Scientific Session. Born in Oakland and raised in the Mission District, Dr. Ferber received his degree in dentistry from UCSF in 1933. A retired Army Reserve Officer, holding the rank of Colonel, Dr. Ferber served in World War II.*

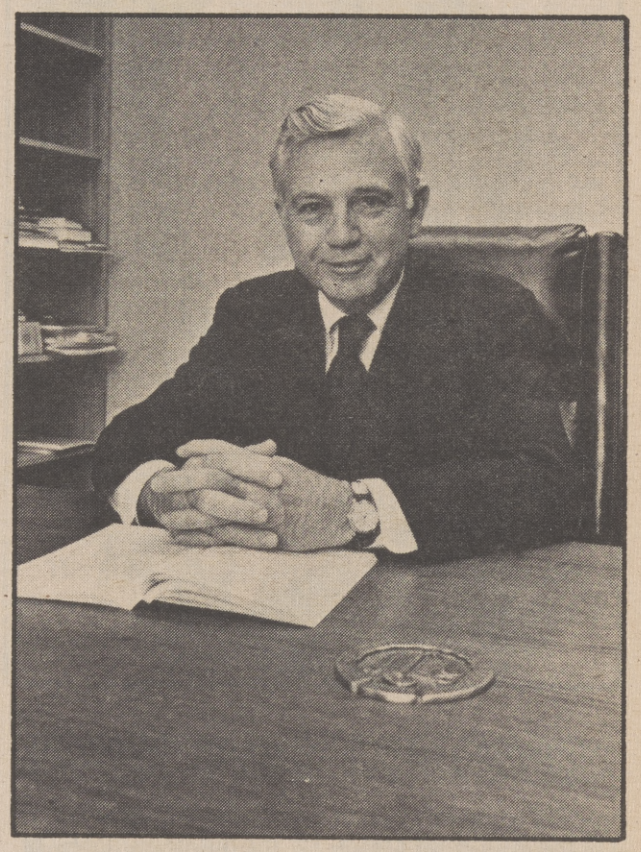
*A plaque of appreciation was presented by Dr. Kitchen, President of the Alumni Association, (right), to past-President Albert Wasserman.*

*Newly installed officers are (left to right) Drs. John Schmidt, Treasurer; C. Carlos Cabrero, Vice-President; Joseph Zucchi, President-elect; Warren Kitchen, President; Frederick W. Schubert, Editor; Donald R. Allen, Secretary.*

*Dr. Arthur Lunblad presents $500 memorial scholarship awards to senior dental students Larry Trapp of Oakland (left) and Richard Benson (center) of Laguna Beach, California.*

*Dean Ben Pavone and Dr. Charles McNeil discussing articulator function at one of the scientific displays.*

# Memo



UCSF health care service has long been recognized for its high quality. The State, through its voters, has committed itself to the retention and strengthening of our health care programs through our hospital regeneration building program. It is understood that dollar constraints due to economic conditions may prolong or defer some necessary health care expenditures. We are determined, however, that the principle of quality health care will not be forgotten or displaced due to present crises or compromises in health care service, policies, and principles.

Present conditions require an increased dedication to the effective and efficient use of public resources. While current State financial plans are meritorious in their intention to provide other needed services, State interests in health care, under these limited dollar conditions, can best be met through continued support of the unique health professionals training, research programs, and health services which are provided by our campus.

Health care, like every other State supported service, will share the burden of higher operating costs, increased public need and demand, and less than adequate funding in the forthcoming year. The levels of funding can neither provide the "catch-up" dollars required to attain higher quality health care services nor maintain the current level of operation, which must struggle against inflationary forces.

What will this mean to all of us as both consumers of health services and workers in the health field? We can expect to be asked to do more with less. Money for growth in operations, salary advancement, and modernization will be difficult to acquire. While dollars for our activities and programs will be in a limited growth position, the costs we bear as purchasers of health services will increase.

*Francis A. Sooy, M.D., Chancellor*

# Communities

## Five Awarded UCSF Medal

The UCSF Medal was awarded recently to five distinguished men in recognition of their extraordinary personal support and commitment to health education and community health care. Their involvement in teaching, research, and public service has helped the University to contribute to the health and welfare of people in the Bay Area and northern California; and indeed, to people throughout the world.

The five recipients, first to receive the UCSF Medal, are Dr. Charles J. Hitch, President of the University of California; Mr. Thomas Mellon, Chief Administrative Officer, City of San Francisco; Dr. John B. de C.M. Saunders, former UCSF Chancellor and Department Chairman; Mr. Morris Bernstein, President of the Board of Fire Commissioners; and Dr. Chauncey D. Leake, first Chairman of the Department of Pharmacology at UCSF and a distinguished scientist, educator, and humanitarian.

Presenting the awards during a dinner held at the Bohemian Club, Chancellor Francis A. Sooy expressed his appreciation to President Hitch, noting his ". . . concerned personal involvement at all levels of University governance." Dr. Sooy mentioned particularly that: "The San Francisco campus has sought his help on many occasions during the last nine years and has never been denied consideration, even though it often involved considerable personal sacrifice on his part."

Dr. Sooy remarked, also, that President Hitch ". . . has guided the University of California through one of its most difficult and trying periods with unfailing devotion to students, faculty, administrators, and alumni."

Mr. Thomas Mellon was introduced by Dr. Stuart C. Cullen, former Dean of the School of Medicine at UCSF. He spoke of Mr. Mellon's service as a member of the Board of Education of the State of California, the San Francisco Police Commission, the Fulbright Commission for the State of California, and many other community organizations. Mr. Mellon continues his support of educational programs as a Regent of the University of San Francisco, of which he is an alumnus.

Vice-Chancellor Leslie L. Bennett, Professor of Physiology at UCSF, highlighted the career of medalist Dr. John B. de C.M. Saunders, including his ". . . legendary abilities to produce ambidextrous anatomical drawings and to awaken a sleeping student with an accurately thrown piece of chalk."

In addition to his accomplishments as a medical historian and anatomist, Dr. Bennett spoke of Dr. Saunder's forty-four years of service to UCSF, during which time he was Chairman of the Department of Anatomy, Librarian, Dean, Provost, Chancellor, and Chairman of the Department of the History of Health Sciences. Dr. Bennett added that Dr. Saunders participated in the planning and development of the campus to become ". . . a great center devoted to the study of the totality of man and his environment. He was ahead of his time in this vision and only now are some of his colleagues catching up with him."

Listing numerous community affiliations which include the Mexican-American Legal Defense and Educational Fund, the Advisory Board of Mary's Help Hospital, the Bayview-Hunters Point Foundation for Community Improvement, and the Jewish Welfare Federation, Dr. Seymour Farber, Vice-Chancellor of Public Programs at UCSF, characterized Mr. Morris Bernstein as a "truly selfless, devoted citizen of San Francisco."

*V. M. Hanks, Jr.*

*Chancellor Francis A. Sooy displays one of the UCSF Medals which were awarded to (left to right) Dr. John B. deC. M. Saunders, Dr. Chauncey D. Leake, Dr. Charles J. Hitch, Mr. Morris Bernstein, and Mr. Thomas Mellon.*

*V. M. Hanks, Jr.*

*About one hundred guests were invited to share the festivities and to honor the recipients of the UCSF Medal.*

Speaking with deep appreciation of Mr. Bernstein's public service, Dr. Farber described "Moe" Bernstein as ". . . a merchandising executive of enormous skill who has an unusual knack of combining practicality with humanity."

Former Dean of the UCSF School of Pharmacy, Dr. Troy C. Daniels, took pleasure in presenting Dr. Chauncey D. Leake, recalling an early award given by Princeton University to Dr. Leake ". . . for competence in the art of eloquence." This talent is evident in the more than 600 publications and 17 books written by Dr. Leake. First appointed to UCSF in 1928 as Professor of Pharmacology, Dr. Leake was given responsibility to form a Department of Pharmacology in the School of Medicine, where he taught and engaged in research until 1942. He returned to UCSF in 1962. Dr. Daniels concluded his remarks with a reference to Dr. Leake's age and sustained verve: "Although he nears an age of four-score, he still carries that spark and enthusiasm to challenge and excite students in the learning process."

In 1972 the University of California discontinued the awarding of honorary degrees. The UCSF Medal was established this year to acknowledge the personal dedication of individuals who continue to support and serve the University and the community.

# A NEW MURAL AT UCSF

*Inspired by the view from the north windows of the Ambulatory Care Center, the children from Grattan Elementary School decided to capture some of the San Francisco skyline. In the mural can be seen the Golden Gate Bridge towers, Kezar Stadium, the Conservatory in Golden Gate Park, boys and girls, and the Zoo with exotic animals.*

*mural photos by Tom Walters*

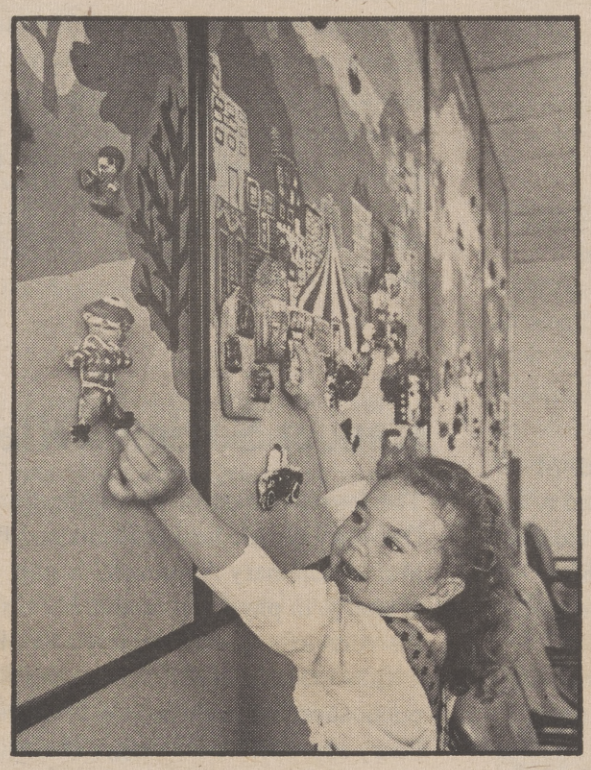
*Three brightly-colored panels form a new mural at UCSF. With paints and baker's-dough, the children of Grattan Elementary School have created an enchanting new perspective of San Francisco. The three-dimensional mural was installed recently by Grounds and Buildings in the Ambulatory Care Center Pediatric Unit.*

*UCSF employee Renee Hall first conceived the idea of seeking a mural one morning as she walked into the somber Irving Street entrance to the campus garage.*

*Together with Jim Wiczai, Director of the Ambulatory Care Center, and Virginia Barnes of the Chancellor's Office she met with Ruth Asawa to discuss the project. As a result Billy (Ilse) Reiss and the pupils from Grattan School agreed to design, organize, and complete the present mural. Arrangements with the San Francisco School System were made through its Art Director, Herb Simon.*

Laurence J. Cuneo

*Ruth Asawa, painter and sculptor. Her works are exhibited currently at the Oakland Museum of Art.*



*The face of petite Jenna Gipson, age two, reflects the pleasure she finds in exploring the scenes and figures in each panel of the mural.*

"Decision-making" and "participation" are words used frequently by San Francisco artist Ruth Asawa when she talks about art.

"To produce a painting or sculpture, or to landscape a garden," she explains, "the artist starts with nothing. In the process of creating, the artist must make many decisions."

Ruth Asawa's philosophy of art and her own artistic works have had a unique impact on San Francisco. Her deep concern about the importance of involving young children in creative activity and relating it to their own environment has generated some exciting projects, a major one through the San Francisco School System.

Because there is no art or music in the primary grades, Ruth Asawa and other parents established the Alvarado School-Community Art Project. Its purpose was: 1. to increase the students' experience with the creative arts; 2. to utilize the talents of professional artists to work with teachers, children, and administrators; 3. to mold a new physical environment with the products of these experiences.

From its beginning in 1968, the program has spread to other elementary schools and the children initially involved have taken the experience with them into junior and senior high school. Murals, block-printed curtains, a rug, mini-gardens, stained glass, mosaics, sculptures have all resulted from the student-community projects.

"Within their own frame of reference," confides Ms. Asawa, "we would like businesses, private schools, colleges, universities, and others to become involved in this program."

Recently the Alvarado Project joined forces with the San Francisco Art Commission. Twenty gardeners and 85 artists in the visual and performing arts have been hired to work directly with the children, parents, and teachers.

# On Campus

Tom Walters

*Chancellor Francis A. Sooy, M.D. is pictured with Driver Claude Dandy as the new shuttle bus is about to make its first trip from UCSF to San Francisco General Hospital.*

## UCSF-SFGH Shuttle-bus

A shiny new blue and gold shuttle bus, purchased by the Chancellor's Office, is now making ten round trips, five days a week between the UCSF campus and San Francisco General Hospital. The 14-passenger Plymouth Voyager, which went into operation early this month, replaced an older mini-bus. The service provides convenient transportation between the two facilities for physicians, medical students, and others. Funds recovered from the State of California from parking fines issued on UCSF property were used to purchase the new vehicle.

Driver Claude Dandy, shown in the photo with Chancellor Francis A. Sooy, has spent two and one half of his six years as a UCSF employee on the shuttle bus run. He has made over 10,000 trips without a single accident . . . an impressive record.

## Alumnus of the Year

Dr. John Najarian, Professor and Chairman of the Department of Surgery at the University of Minnesota was chosen to receive the California Alumni Association's highest award. He was honored as the University of California's Alumnus of the Year at the traditional Charter Day banquet held April 11th in San Francisco.

A native of Oakland and a graduate of UC Berkeley Dr. Najarian received his medical degree from the UCSF School of Medicine in 1952, where he also completed his internship and residency. He was named a John and Mary Markle Scholar in 1964 and was the recipient of the California Trudeau Society Award in 1962.

The outstanding kidney transplant service at UCSF was established under the direction of Dr. Najarian. He also conducted a research program concerned with determining the basic mechanisms involved in the tissue-rejection process.

Dr. Najarian succeeded Dr. Owen Wangensteen as Professor and Chairman of the Department of Surgery at the University of Minnesota's College of Medical Sciences in 1968.

## Guggenheim Award to UCSF Geneticist

Robert P. Erickson, M.D., Assistant Professor of Pediatrics In Residence at UCSF, was awarded a Guggenheim fellowship for his experimental studies in developmental genetics. He will continue his research on the antigens that affect both sperm and early embryotic development. Dr. Erickson will conduct his studies at the Francois Jacob Laboratory of the Pasteur Institute, Paris, France beginning in July, 1975.

## Medical Records Manager

Lydia M. Daniels was appointed Manager of the UCSF Medical Records Department, effective April 1. Her most recent position was that of Chief Medical Record Administrator at Highland General Hospital, Oakland. From 1965 to 1972, she was the Chief Medical Record Librarian at Samuel Merritt Hospital in Oakland.

Ms. Daniels has participated actively in national and state medical record associations, and is currently the President of the California Medical Record Association.

In addition to her professional activities, she has provided leadership in volunteer activities, particularly in youth education and training.

## Assistant Vice-Chancellor

Recently appointed Assistant Vice-Chancellor of Administrative Coordination and Planning at UCSF, Arthur L. Gillis, Ph.D. is also Director of Burget. He was formerly Assistant Vice-President for University Administration and Planning at the University of Iowa, where he was an Associate Professor of Educational Administration. Dr. Gillis succeeds Mr. Lawrence Hershman.

A native of Chicago, Dr. Gillis is a graduate of Roosevelt University and received his doctoral degree in administration from the University of Illinois in 1970.

## Acting Director to Retire

Mary Lou Kemper, Associate Director of Nursing Service, will be retiring at the end of June. Ms. Kemper has served as a member of the Nursing Service here since her graduation from the UCSF School of Nursing in 1944. She has held a variety of positions and was Acting Director of Nursing Service from May 1972, following the retirement of Irma Nickerson, until July 1973, when Martha E. Haber was appointed permanent Director.

Martha Haber paid the following tribute to her retiring Associate Director: "Mary Lou has been invaluable in her willingness to share with me her tremendous knowledge of the history of this Nursing Service and Hospital. She has been a loyal and compassionate friend to many of us, and we shall miss her organizational skills and human approach to nursing practice."

## Cancer Society Offers Book

The fourth edition of the publication, "Clinical Oncology for Medical Students and Physicians, A Multidisciplinary Approach," is now available free of charge to physicians and medical students from, the American Cancer Society's San Francisco unit.

Consisting of 24 articles totaling 580 pages, the publication comprehensively presents a multidisciplinary approach to oncology. The volume, compiled by the University of Rochester School of Medicine, is published by the American Cancer Society. The articles cover general aspects of the cancer problem including its incidence and pathology, the social and psychological aspects of the disease, the indications for and limitations of treatment by surgery, radiotherapy and chemotherapy, and a presentation by site of current practices from a united, cross-specialty perspective.

## Theater Group Presents "Night Watch"

Millberry Repertory Theater (MRT) is proud to announce its next production, "Night Watch," a suspense drama by Lucille Fletcher, which will be presented on Thursday, May 29 and Friday, May 30 in the Guy S. Millberry Union's Steninger Gymnasium. Ms. Fletcher is best known for her work "Sorry, Wrong Number." Curtain time is 8 p.m. An additional understudy's performance will be presented on Saturday, May 31, at the same time and place. Admission is $2.00 general and $1.50 for students and senior citizens.

There are currently openings for actors, singers, dancers, musicians, and technical personnel for MRT's Fall Musical, for which details will be announced at a later date.

For further information call 666-1078 or 666-2019.

# HONORS

Marian Mills, a Nurse Practitioner in the UCSF Pediatrics Clinic, was one of the first 25 nurses in the United States to receive the American Nurses' Association's newly developed certificate for excellence in nursing practice. Ms. Mills, a member of the nursing staff here since 1972, qualified for the award by taking a three hour examination and submitting a series of case histories.

Julia B. Robinson, Administrator, Langley Porter Neuropsychiatric Institute, nominated a member of the Personnel Committee of the Association of Mental Health Administrators. The Committee is concerned with labor-management issues and the annual salary survey made by the Association.

Dr. Lou Hansen, Professor of Oral Pathology and Forensic Pathology and Medicine, has been appointed to the Clinical Cancer Education Committee of the National Cancer Institute.

Phillip R. Lee, M.D., Professor of Social Medicine and former Chancellor of UCSF, has been appointed to head the National Council of the newly created Alan F. Guttmacher Institute of the Planned Parenthood Federation of America.

The newly created Institute will carry on research and development to help regulate fertility and overpopulation. It is named for the late obstetrician who had been president of the Planned Parenthood Federation for more than a decade.

## Annual Camp-Abbott Lectures

The Annual Samuel Higby Camp Lectureship, combined with the scientific program of the Le Roy C. Abbott Society, will be presented April 29 through May 2, 1975.

Dr. Rocco A. Calandruccio, Clinical Associate Professor of the University of Tennessee, will be the Samuel Higby Camp Visiting Professor. His speech, entitled "Avascular Necrosis of the Femoral Head: Experimental and Clinical Studies," will be given May 1, mid-morning. He is also a staff member of Campbell Clinic, Memphis, Tennessee.

On May 2, Dr. Loren Larsen, Clinical Professor of Orthopedic Surgery, UCSF, will speak on "Surgical Treatment of Congenital Dislocation of the Hip in the Older Child." Dr. Larsen is also Chairman of the Department of Orthopedic Surgery at Children's Hospital and Medical Center and Chief Surgeon at Shriner's Hospital for Crippled Children, San Francisco.

The meetings will be held at UCSF April 29 and 30 in the Post-Graduate Auditorium of the School of Dentistry (Room 701 Clinics). The lectures May 1 and 2 will be presented in Cole Hall.

## Film Wins Award

A film entitled "Neurology Seminar," produced at UCSF, was an award winner in the 10th Chicago International Film Festival. Produced and directed by Charles E. Peterson, a member of the Communications Office, Research and Training, the film is used for instructing medical students. Dr. Thomas H. Newton, Professor of Radiology and a neurologic diagnostician, leads the videotaped seminar which demands participation by the audience.

Copies of these and other educational films produced at UCSF are used by more than 60 hospitals and medical centers across the country.

## Workshop in Berkeley

A workshop on Sex and Disability will be held May 23 and 24 at UC Berkeley. Co-sponsors of the workshop to be held in the Pauley Ballroom are: UCSF Human Sexuality Program, United Cerebral Palsy Association of San Francisco, and the Disabled Women's Coalition, Berkeley.

Participating in the Workshop are Robert Geiger, M.D., Director, and Susan Knight, Coordinator of the Sex and Disability Project, Human Sexuality Program.

For further information call or write Susan Knight, 727 Parnassus Avenue, San Francisco, CA 94143, (415) 666-4787.

## Nursing Service Appointment

Martha E. Haber, Director of Nursing Service, has announced the appointment of Ruth Colavecchio to the newly created position of Acting Associate Director for Clinical Practice. This position will be formalized by its permanent addition to Nursing Service Administration on July 1, 1975.

Ruth Colavecchio, who has been a member of the UCSF Nursing staff since October 1966, is currently Assistant Director, Staff Development. She has played a major role in designing the University-wide Clinical Nurse Series, described in a separate article in this issue of *UCSF News*. Her initial activities in her new position will focus on implementation of the Clinical Series at UCSF.

## Staff Employee Council

The UCSF Staff Employee Council (SEC) was formed in 1970 "to foster greater communication between Campus groups and to act in the interest of Staff Employees." There are now 65 delegates to the Council with an equal number of alternates. Each delegate represents approximately 100 employees. The Council acts in an "advisory" capacity, and is directly responsible to the Chancellor.

Attempts to identify and rectify campus-wide problems, and to prevent potential ones, is the main order of business; improving channels of communication is the principal means of achieving this end. The Council reviews and appraises personnel policies, programs and activities, and serves as a coordinating body in an effort to provide a better working relationship between all levels of staff and management. The Council has representatives on major campus committees and sends representatives to every meeting of the statewide Staff Personnel Board.

The Council has recently been instrumental in securing a bus shelter on Parnassus Avenue, and is an advocate for construction of a Child Care Center on the site of the old Nurse's Dormitory on Parnassus at Third Avenue. The Child Care Center has been approved for construction pending review of environmental impact.

All staff employees are welcome to participate in the activities of the Council. Regular meetings are held on the third Tuesday of each month, from 2:00 to 4:00 p.m. in Room 303 HSW. These meetings, as well as all Executive Board meetings, are open. Any staff employee may also serve as a non-voting member on one of the Council's standing committees. They are:

POLICY AND PROCEDURE (reviews University-wide policies): Chairperson: Margaret Warren.

MEMBERSHIP (keeps up-to-date roster of all delegates and conducts elections): Chairperson: Walter Nelson.

COMMUNICATIONS (puts out the SEC newsletter and arranges for publicity and speakers): Sheryl Bierne.

BY-LAWS (reviews constitution and by-laws and provides a parliamentarian): Chairperson: James Thede.

ACTION (trouble-shooting, informational committee; acts as omsbudsman): Chairperson: Mary Davis.

The President of the SEC is Cary Martin, and the new permanent office is at 1361-A Third Avenue. The mailing address is Box 210, Millberry Union.

*James B. Thede*

## Toxicology Award to Hodge

Dr. Harold Hodge, Professor in Residence, Pharmacology and Oral Biology, is the first recipient of the Toxicology Education Award of the Forum for Advancement of Toxicology. The award, presented during the 14th Annual Meeting of the Society of Toxicology, honors Dr. Hodge as a devoted teacher.

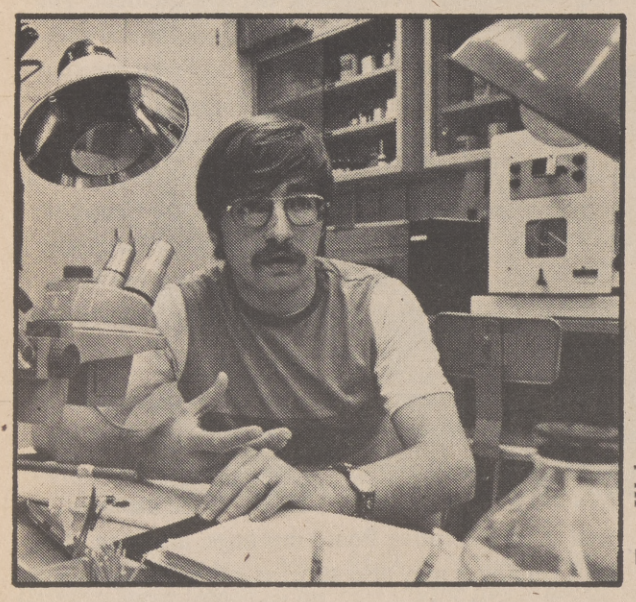
A member of the Department of Pharmacalogy at UCSF since 1970, Dr. Hodge was formerly a member of the faculty and chairman of the Department of Pharmacology and Toxicology at the University of Rochester. He was the recipient of the Gold Medal Award given by the University of Rochester Alumni Assocaton "in recognition of high integrity, inspiring teaching, and devotion to medical students."

From 1943 to 1958 Dr. Hodge was Chief Pharmacologist of the Manhattan Project.

Dr. Hodge is a Senior Editor of "Clinical Toxicology of Commercial Products," first published in 1957 by the Williams and Wilkins Company. The fourth edition will be issued next month.

Dr. Hodge currently participates in a new course on fluorides started by Dr. Ernest Newbrun for dental students at UCSF.

## Graduate Students Contest



Tom Walters

*William Engeland, First Prize Winner of Graduate Students Association Research Contest is a native of St. Paul, Minnesota. He is the son of Mr. and Mrs. B. W. Engeland of that city.*

The UCSF Graduate Students Association's 510 members represent 23 separate departments. Recently, the Association announced the winner of the Research Contest sponsored by the Association. First prize was awarded to William C. Engeland for his work performed in the Department of Physiology. He prepared his paper, which is entitled "Neutral Control of Compensatory Adrenal Hypertrophy," under the preceptorship of Dr. Mary F. Dallman, Assistant Professor of Physiology and a member of the Metabolic Research Unit as UCSF.

The First Prize consists of $250, plus an all-expense paid trip to the National Student Research Forum held this year in Galveston, Texas.

Experiments by William Engeland were related to the phenomenon of compensatory growth of one adrenal gland when the other is removed. A similar reaction occurs in other organs; such as kidneys, ovaries, and testes.

It was previously believed that this adrenal growth was caused solely by a pituitary-controlled hormone, possibly ACTH.

The conclusions reached by graduate student Engeland's research are that: 1. increased secretion of ACTH is not essential for the compensatory adrenal growth; the compensatory growth is the result of neural action.

A graduate of Notre Dame University, Engeland is studying for his doctoral degree in endocrinology.

Second prize winner is Linn Roth, Department of Physiology. Steven A. Colwell, Department of Anatomy, placed third. From the Department of Microbiology, Gordon Ringold won fourth prize. Fifth prize was awarded to Kathryn M. MacLeod, Department of Biochemistry.

President of the Graduate Students Association, Bill Schmidt, reminds graduate students that in addition to the Research Contest, the Association has other programs, including a loan fund and a travel fund. The latter is to help students attend national scientific meetings and other conferences.

"Graduate students," he explains, "often have needs separate or additional to those of students in the Schools of Dentistry, Medicine, Nursing, and Pharmacy. The main focus of the Association is to develop both academic and social ties among graduate students."

Tom Walters

*Dr. Mary F. Dallman, Preceptor for prize-winner Engeland, is a Stanford graduate. Her research is concerned with the regulation of adrenal function.*

## Childrens Renal Center

To celebrate the opening of the Children's Renal Center, now fully equipped and functioning on the second floor of the UCSF Ambulatory Care Center, a reception is being held Monday, April 28, at 4 p.m.

Among the invited guests are representatives of the State Department of Public Health and members of the California State Legislature who were instrumental in obtaining a $182,000 State subsidy to expand this regional Children's Renal Center for Northern California. Hosts for the reception are the UCSF Department of Pediatrics and the Hospitals and Clinics Administration.

Formerly located at San Francisco General Hospital, the eight-year old center was a pioneer in the care of children with chronic kidney disease. The UCSF program, and a similar one at Children's Hospital of Los Angeles, have the world's most comprehensive experience in this specialty.

With the move to the UC Medical Center, the Children's Renal Center doubled its dialysis unit from two to four beds and consolidated inpatient and outpatient children's renal services on the UCSF campus. The UC Adult Renal Center is continuing its service at San Francisco General Hospital.

The Children's Renal Center was established with the philosophy that placing children on dialysis (artificial kidney machines) should be an interim measure for children awaiting transplants. The service is designed to meet the total needs of the young patient and his family, from diagnosis to transplantation and post-transplantation care and counseling.

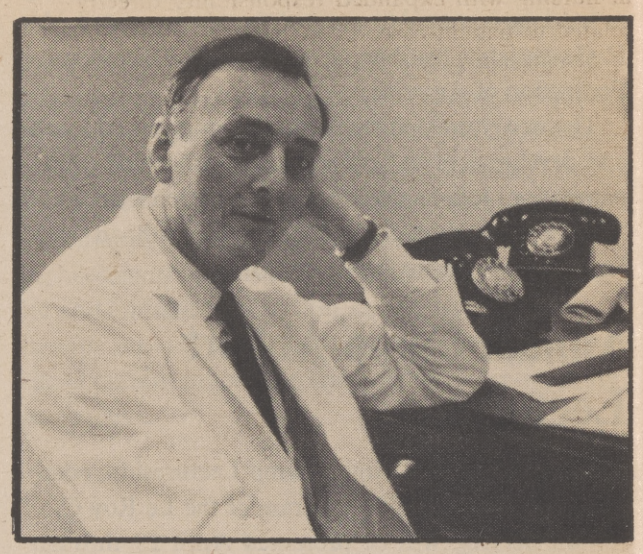
Headed by Malcolm Holliday, M.D., Professor of Pediatrics, the center uses a professional, team approach to patient care. This involves the services of pediatric nephrologists, highly skilled dialysis nurses and technicians, a dietician with expertise in renal nutrition, and a public health nurse and a social worker who specialize in chronic patient care.

Together, these experts help the child and his family to meet many complex day-by-day problems encountered as a result of kidney disease.

Dr. Holliday is widely known for his research to develop special high calorie, salt-free diet supplements for children on dialysis. Without special diets, it is found that these children fail to grow and mature normally.

An innovative feature of the new center is a demonstration kitchen used to help parents to learn how to prepare attractive and palatable dishes using diet supplements.

## Dr. Mollison Visiting Professor



*Dr. Patrick L. Mollison, Director of Medical Research Council, St. Mary's Hospital Medical School, University of London.*

The eminent British professor, Dr. Patrick L. Mollison, will be Visiting Professor at UCSF's Department of Clinical Pathology and Laboratory Medicine in May, 1975, to give lectures and seminars on the topic of blood transfusion.

Dr. Mollison, a Fellow of the Royal Society, is Director of the Medical Research Council, Experimental Hematology Unit at St. Mary's Hospital Medical School, University of London.

He will also participate in the symposium, "Blood Transfusion 1975," to be presented May 9-10 by the Departments of Clinical Pathology and Laboratory Medicine and Extended Programs in Medical Education, UCSF, in cooperation with the Irwin Memorial Blood Bank of the San Francisco Medical Society.

# Hospitals and Clinics: Synergy

## "Clinical Ladder" in Nursing

Throughout the nursing profession there is a growing pressure for change. Nurses are seeking a new identity, new independence, and a greater voice in matters affecting patient-care.

An important response to these trends is the development at UC health care facilities throughout California of the new Clinical Ladder concept of nursing practice.

At the San Francisco campus, this concept is being tested in a pilot-project of the Moffitt Hospital's sixth floor Pediatrics Unit. Coordinator of the project is Anna Mullins, R.N., an Assistant Director of Nursing assigned to this unit, who has recently earned her Doctorate of Nursing Science degree at the UCSF School of Nursing.

It is generally understood that the first priority of nursing service should be to provide high quality care for the patient. Nonetheless, the competent R.N. has been traditionally rewarded with a promotion that takes her away from the patient's bedside and places her under an avalanche of paperwork. As a Head Nurse or Supervisor, she finds herself literally "nursing the system instead of the patient."

**Clinical Ladder Series**

The Clinical Ladder concept is expected to resolve this paradox by rewarding clinical competence in nursing with expanded responsibility directly related to patient-care. The Clinical Ladder series of job classifications is designed to create more fulfilling roles not only for Head Nurses but for those at all staff levels.

In the first phase of the Pediatrics Unit pilot project, a peer-review committee is currently working with Anna Mullins to evaluate present duties of the Pediatrics nursing staff in terms of the Clinical Series job descriptions for the new classifications of Clinical Nurse I through IV.

Members of the peer-review committee include nurses at various levels; a representative of the UCSF School of Nursing, with expertise in Clinical Nursing; a representative of the Consumer Advisory Board of the California Nurses Association; and a member of UCSF Nursing Services Administration.

While implementing the Clinical Series on the Pediatrics Unit, Ms. Mullins will begin using her administrative and clinical skills to develop a role model for the position of Clinical Nurse IV. Her nurse colleagues, presently working at the levels of Staff Nurse, Senior Staff Nurse, and Head Nurse in the Pediatrics Unit, will demonstrate role models for Clinical Nurse I, II, and III.

In the course of their day by day duties, they will collaborate with physicians and other members of the health-care team to carry out plans of care for the patients.

Describing the implications of this new approach to nursing service in the Pediatrics Unit, Ms. Mullins says: "Because UCSF is a major referral center, many of our patients come to us with serious medical problems. We see very few tonsillectomies here, for example. Our patients are more likely to be children undergoing open heart surgery, or kidney transplants, or children with leukemia receiving chemotherapy. It takes a highly motivated staff to provide the special care and support such patients and their families require."

Tom Walters

*Anna Mullins, R.N., who recently earned a doctoral degree in Nursing, explains that the Clinical Ladder will allow nurses to devote more time to patient care and still be able to advance within the profession.*

When nursing practice on the unit has been re-organized according to the Clinical Ladder concept, the pediatrics nurses hope to be even more effective than they are at present in meeting patient care needs and improving the quality of care.

**Unit Management**

A key to the success of the pilot-project is the participation of the Pediatrics Unit Manager Charles Kredensor. In the ten years since he helped to pioneer the Unit Manager system at UCSF, he and Unit Managers in six other inpatient areas have clearly demonstrated their value in relieving professional nurses of activities not directly related to patient-care.

Today's hospital is a complex organization within which the Unit Manager can play a vital part by serving as "an extension of administration" on the patient-care unit.

The Unit Manager is a colleague of the Head Nurse and the special skills he brings to the patient-care area can help make it possible for professional nurses to redefine their own roles.

For example, in the early sixties, before the Unit Manager system was introduced at UCSF, studies revealed that head nurses were spending about 10 percent of their time with patients and the other 90 percent handling a variety of management responsibilities. Studies also documented up to 60 head nurse interractions (or interruptions) per hour concerning matters ranging from plumbing problems to laboratory reports gone astray.

The Unit Manager system has produced impressive results that reverse these trends. The Unit Managers, who, through their Chief Unit Manager Edward Boyle, are responsible to Nursing Administration, are in charge of administering budgets for their respective units, for ordering and stocking supplies, and for keeping equipment in repair.

Each Unit Manager supervises a staff of Unit Assistants responsible for the day by day supply and housekeeping activities on the patient unit. In addition, the Unit Managers coordinate various patient services involving ancillary departments, such as Central Supply, Laundry, Dietary, and the Laboratories. Unit Managers are also available to listen to and solve complaints of patients in their areas.

**Improved Patient-Care**

Martha E. Haber, UCSF Director of Nursing Service, expresses the hope that the Clinical Series concept "will make it possible to meet demands for accountability in the delivery of nursing care that is appropriate both to the needs of our patients and to the levels of educational preparation available."

Evaluation of the pilot project, she notes, will assist in eventually extending Clinical Series concept throughout the UCSF Nursing Service. "However," she added, "our Nursing Service is a large and highly specialized one, so I anticipate that the move to the Clinical Series will proceed slowly over the next four years."

Miss Haber commented also on the important role of staff involvement in the development of the new concept. This involvement, she says, is demonstrated by the activities of the peer-review committee, which are described in this article, and includes the special leadership of Barbara Teschner, Coordinator of "Project Partnership," and Ruth Colavecchio, Associate Director of Nursing-Clinical Practice; both of whom "have strongly influenced the Clinical Series concept through five years of collaboration with nursing representatives from all the UC campuses."

Tom Walters

*Unit Manager Charles C. Kredensor keeps the Ninth Floor in Moffitt Hospital running smoothly.*

"The pilot unit is a project of concern for all of Nursing Service and, to a degree, the entire staff of the UCSF Hospitals and Clinics. The concept of the Clinical Series is one that holds great promise for nursing," predicts Miss Haber.

*Claire Wray*

# SCHOOL OF MEDICINE ALUMNI

## HOMECOMING 1975

### CLASS OF 1950 SCIENTIFIC SYMPOSIUM

**Dr. William F. Hoyt, Chairman**

**SEMANTICS AND THE DOCTOR-PATIENT RELATIONSHIP**

**J. Peter Mark, M.D.**

**ON THE NEW CURRICULUM AT THE UNIVERSITY OF PENNSYLVANIA**

**Philip Mechanick, M.D.**

**REHABILITATION — A RESPONSIBILITY OF EVERY MEDICAL SPECIALTY**

**Jacquelin Perry, M.D.**

**TWENTY-FIVE YEARS OF CLINICAL LABORATORY MEDICINE AT SAN FRANCISCO GENERAL HOSPITAL**

**Myron Pollycove, M.D.**

**WALKING THROUGH THE COUNTRY (WEST)**

**Paul H. Trotta, M.D.**

**This program is scheduled for 2:00-4:30 p.m.**

**May 10th in Toland Hall**

***HOMECOMING LUNCHEON***

***Millberry Union***

***Dr. Julius R. Krevans***
***Guest Speaker***

***BANQUET***

**For further information call Alumni Office 666-1471**



# SFGH

## Hospital Week Observance

"San Francisco General Hospital: We Care" is the theme of the one-day observance being planned at SFGH on Wednesday, May 14, during National Hospital Week.

Showing kindness and compassion toward patients is a year 'round responsibility for the Hospital's staff and employees, and this "special day in May" is being set aside as a reminder of that commitment.

The event is sponsored by the Personnel Committee of the Hospital, composed of elected and appointed employee and supervisory employees. It has the special support of the Administrator's Office, the Hospital Volunteers, and the Nursing Service.

Music, springtime decorations, and posters will brighten the Hospital: living plants will be delivered to the patient wards; and every adult inpatient will be personally visited and presented with a fresh flower to wear. These are just some of the ideas being developed by the Personnel Committee, which is headed by James C. Berkley, Assistant General Services Manager.

## Directory Coordinated with Centrex

The Spring 1975 edition of the new SFGH Communications Directory will be distributed soon. The directory is being produced to coordinate with the new Centrex phone system which will go into operation soon at the Hospital. It will list the room number, building number, and telephone extension number of every City and University-staffed office and service at the Hospital.

The new directory, which will be revised every few months, is being compiled by Gerald Feliciano, of Hospital Information Systems, and Jane Vance of the UC Dean's Office at SFGH.

## Notes

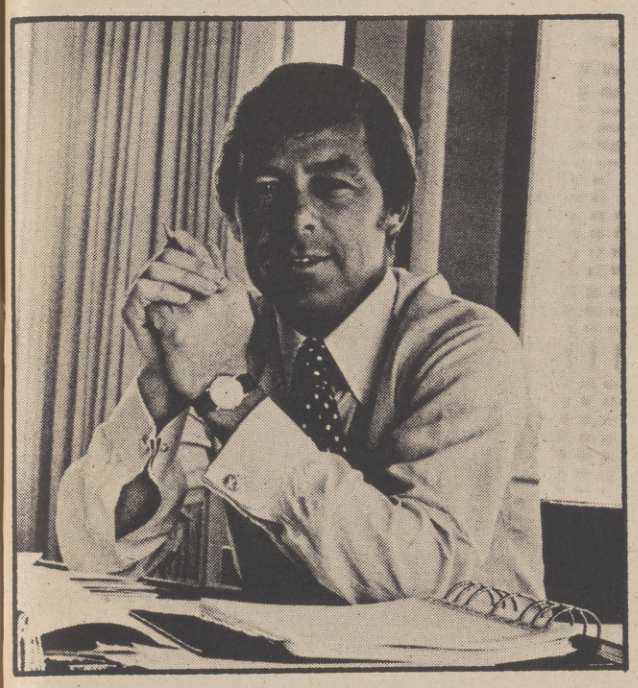
Three members of the medical staff and faculty of SFGH participated in international meetings during March.

W. McFate Smith, M.D., Clinical Professor of Medicine, and Associate Dean and Medical Director of SFGH, was invited to Madrid, Spain, to take part in a conference sponsored by the World Health Organization on "Intervention Trials in Mild Hypertension." He reported on the U.S. Public Health Service Study now completing eight years of controlled observations in eight Public Health Service Hospitals. Of nine such studies throughout the world, no other has more than two years observation. Dr. Smith is Chairman of the U.S. Public Health Service Cooperative Study Group which conducted the trials.

Donald Trunkey, M.D., of the Department of Surgery, was a member of the guest faculty for the Colombian College of Surgeons postgraduate course in Bogota, Colombia. Melvin M. Scheinman, M.D., head of the Coronary Care Unit, spoke at the World Congress on Electrocardiology in Bombay, India.

# Auxiliary

## Miottel Elected President



*W. John Miottel, Jr., was elected president of the Board of Directors of the Volunteer Auxliary to San Francisco General Hospital at the Auxiliary's recent annual meeting.*

Newly elected president of the Board of Directors of the Volunteer Auxiliary to SFGH is W. John Miottel, Jr., Chairman of Miottel, Chamberlain & Company, an investment management firm. He succeeds Mrs. John Ward Mailliard III as president.

The new Auxiliary president is a native of Detroit and a graduate of both UCLA and the CORO Foundation public affairs internship program. He came to the Bay Area after spending several years as a Navy fighter pilot. A Director and past president of the International Institute of San Francisco, he is currently on the executive committee of the Head-Royce Schools in the East Bay.

Other new officers of the Board are Michael R. Marron, First Vice-President; Mrs. Wilson J. Wray, Second Vice-President; Mrs. Abe Mellinkoff, Secretary; and Alex B. McAllister, Treasurer. New Board members are Mrs. Alvin Cox, a former president of the Stanford Hospital Auxiliary; Luisa Esquero, of the Model Cities Program; John O. Stewart, former chairman of the Neighborhood Legal Assistance Committee; Kline A. Wilson, SFGH consumer and longtime supporter of the Volunteers, and two SFGH physicians: Julian Hoff, M.D., Chief of Neurosurgery, and John Mills, M.D., Medical Director, Emergency Walk-In Service.

## Appointment

Newly appointed Assistant Chief of Neurosurgery at SFGH is Lawrence Pitts, M.D., formerly a Chief Resident at UCSF. Dr. Pitts was recently named recipient of the 1975 Van Nagenen Fellowship of the American Association of Neurological Surgeons.

## Annual Luncheon Meeting

The Annual Luncheon Meeting of the UC Hospitals Auxiliary will be held on Wednesday, May 14, during National Hospital Week. More than 100 members and guests of the Auxiliary will gather at Millberry Union for a preview of exhibits and demonstrations which will carry out the Hospital Week theme, "Constant Concern for a Healthy Community."

Mrs. William Margaretten, chairman of the annual meeting, announces that founding members and special friends of the Auxiliary will be honored at the luncheon. A program will be presented by Gail Perrin, Clinical Nurse Specialist, and Barbara Wallace, M.S.W., of the Moffitt Hospital Pediatrics Unit. They will describe the unit's special work in support of patients with leukemia and their families.

Following the Auxiliary's meeting, the Hospital Week exhibits will be opened to the public. They will include demonstrations of new life-saving equipment, information on preventive health care and on health careers. A special invitation is being extended for high school students, who will have an opportunity to meet with UCSF staff members representing various health sciences careers.

Ed Martinez, Associate Planner, Hospitals and Clinics, and Jacqueline Brunberg, Acting Director of Nursing Service, Ambulatory Care Center, are in charge of plans for the one-day observance.

## Mini-Ambulance Given by Auxiliary

A mini-ambulance to provide emergency transportation between the UCSF Ambulatory Care Center and Moffitt Hospital is the Auxiliary's most recent gift to the Hospitals and Clinics.

The electric vehicle, purchased at a cost of approximately $3,300, carries three passengers, a stretcher, and first-aid equipment. It is complete with siren and flashing red lights.

## Second Musical in May

By special demand, the UC Hospitals Auxiliary will present "A Potpourri of Musical Arts II," on Friday, May 16, at 8 p.m. in the Century Club, San Francisco.

"Maestro" Ephraim P. Engleman, M.D., Professor of Medicine and an accomplished musician, will direct this second annual benefit concert of classical music, jazz, dance and song by talented members of the UCSF campus community. Mrs. Hilliard Katz is chairman.

## Auxiliary Notes

Mrs. Robert B. Hutchins, Jr., president of the UC Hospitals Auxiliary board of directors, and Jerome Yalon, assistant director, Hospitals and Clinics, were special guests at the recent meeting of the Northern California Directors of Volunteers held at UCSF. Twenty-eight hospital volunteer directors from all parts of the greater Bay Area attended the all-day meeting, which featured a demonstration of audio-visual aids.

Final plans for the Moffitt Hospital Meditation Room will be submitted for approval by the Auxiliary's Board of Directors at its June meeting, announces Mrs. Edward Liska, chairman for this project.

Joan Brandt has been employed as full-time administrative assistant to the UC Hospitals Auxiliary. A native of New York, she was graduated with honors in Anthropology from Herbert Lehman College, a division of the City University of New York. The new secretary may be contacted at the Auxiliary's Office, 666-4906.

### AUXILIARY MEMBERSHIP

application

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Moffitt Hospital, U.C. San Francisco 94143

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ADDRESS_____

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| ACTIVE .....$10 per year | CONTRIBUTING ...$25 per year |
| ALUMNI .....$10 per year | SUSTAINING .....$50 per year |
| VOLUNTEER (those active in volunteer service at UC Hospitals) .....$2 per year | PATRON .....$100 per year |
| | SPONSOR .....$150 or more per year |
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# Inside

Research at the Hooper Foundation reveals an immune system in a parasite-bearing snail. Scientists believe that biological control may conquer the disease caused by the parasite which passes from man to the snail and back to man. 1

New findings from research at UCSF have focused on the cause and successful treatment of a fatal childhood disease. 2

A graduate of the School of Dentistry, himself a minority member, talks about community awareness and health care. 3

The University's San Francisco Medical Center honors five citizens in recognition of their personal support and commitment to health education and community health care. 7

A new program at UCSF to restore opportunities for nurses that will allow them to pursue clinical practice rather than administrative careers. 13

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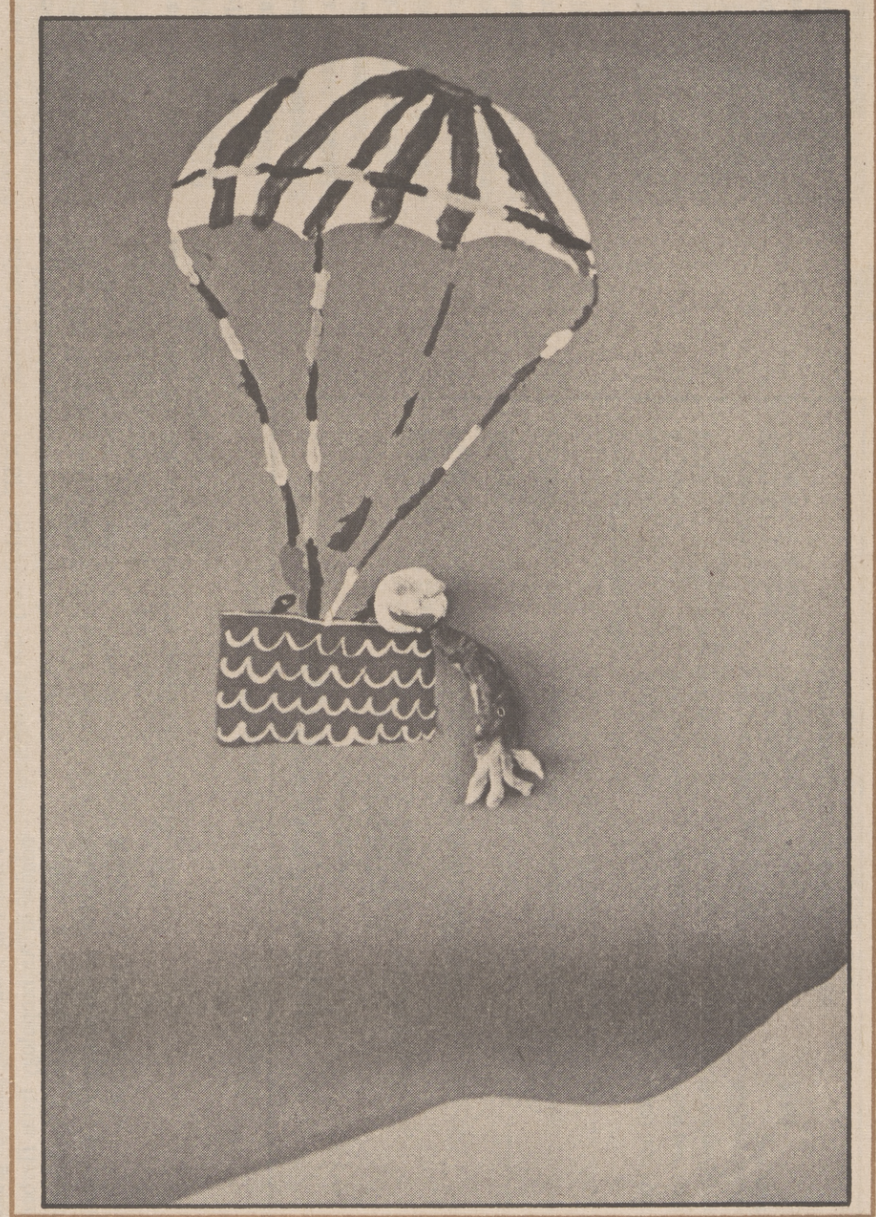

*Ballooning reveals new perspectives in the Ambulatory Care Center's Pediatric Unit* (*see pages 8-9*).